

## **Production Booklet**

for

## COLLECTIVE 4TH FLOOR SPA

2800 Richter Ave. Suite C, Oroville, CA 95965 • voice: (530)534-9910 fax: (530)534-9915 • email: sales@tiledspas.com • website: www.tiledspas.com



#### **RECOMMENDED MAINTENANCE**

#### **Please Note:**

These are only recommended guidelines to care for a Nespa all tiled spa. Local codes may require additional procedures, therefore consult with a pool professional that is LA county Health Department ceritfied for more information on local codes and requirements.

#### SPA SURFACE

Your spa tile is acid resistant and frost-proof. The Tile does not absorb germs or algae. Tile does not stain and is very easy to clean. Color does not fade or loose its luster. All grouts are epoxy based and are extremely durable. To remove scum line use soft nylon brush and small amounts of biodegradable soaps. Do not use abrasive brushes or chemicals.

#### MAINTENANCE

#### A. CHEMICALS:

- 1) It is important to maintain a chlorine residual of 2 PPM in the spa. That residual can be provided by chlorine or bromine.
- 2) It is recommended to use Bromine or dichlor (granular) forms of chlorine. If bromine Tabs are used we suggest floating or inline dispenser.
- 3) Never use acid to lower Ph in the tile spa.
- 4) Never use trichlor chlorine (1" or 3") tablets in the Nespa spas.
- 5) Never place tablets in skimmer basket.

#### **B. DRAINING THE SPA:**

- 1) It is recommended to drain the spa at least once every 2 months depending on bath load and water clarity.
- 2) The spa should be drained through valve exiting re-circulation pump in the spa equipment room or sump pump.
- 3) Note: Use caution to drain spa in the winter months or rainy season when water table is at its highest. It is possible for the spa to float due to hydraulic pressure from surrounding water table. We advise that you consult with your local spa specialist prior to draining the spa.

#### **C. SPA EQUIPMENT:**

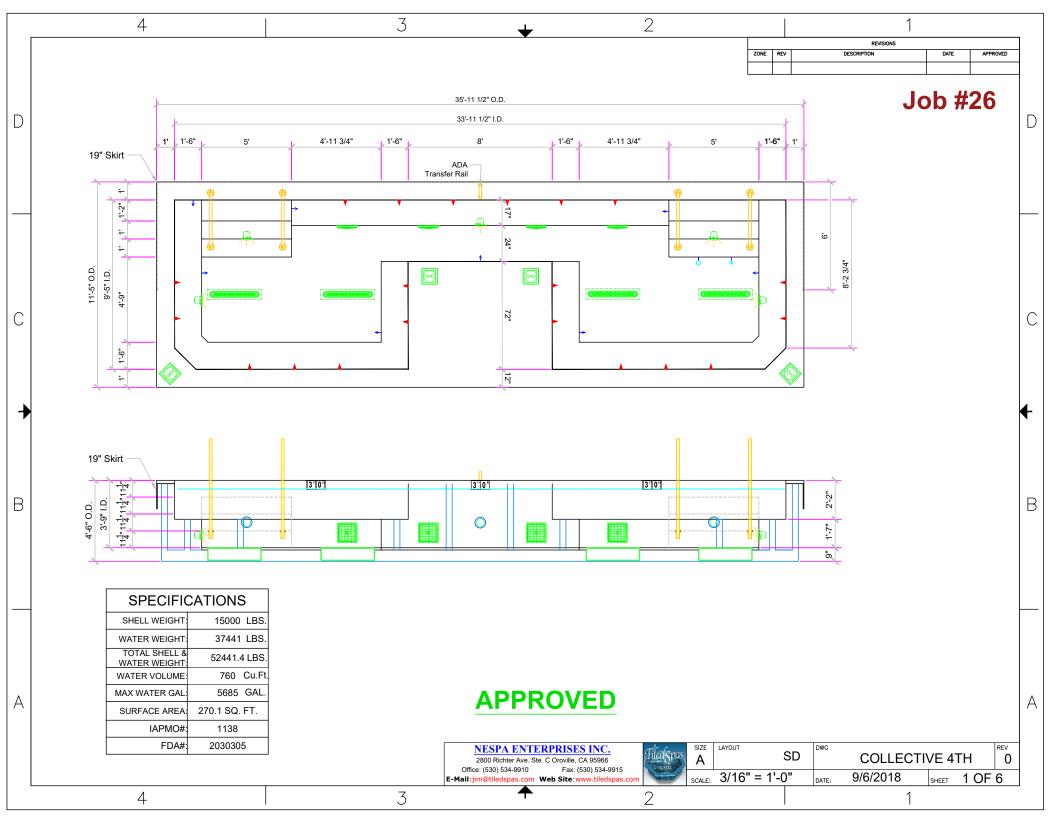
- 1) Clean filter cartridge at least once every month, or when needed; i.e., if water clarity does not improve after several days.
- 2) Keep area free and clear from leaves and debris build-up.
- 3) Keep area free and clear from flooding.

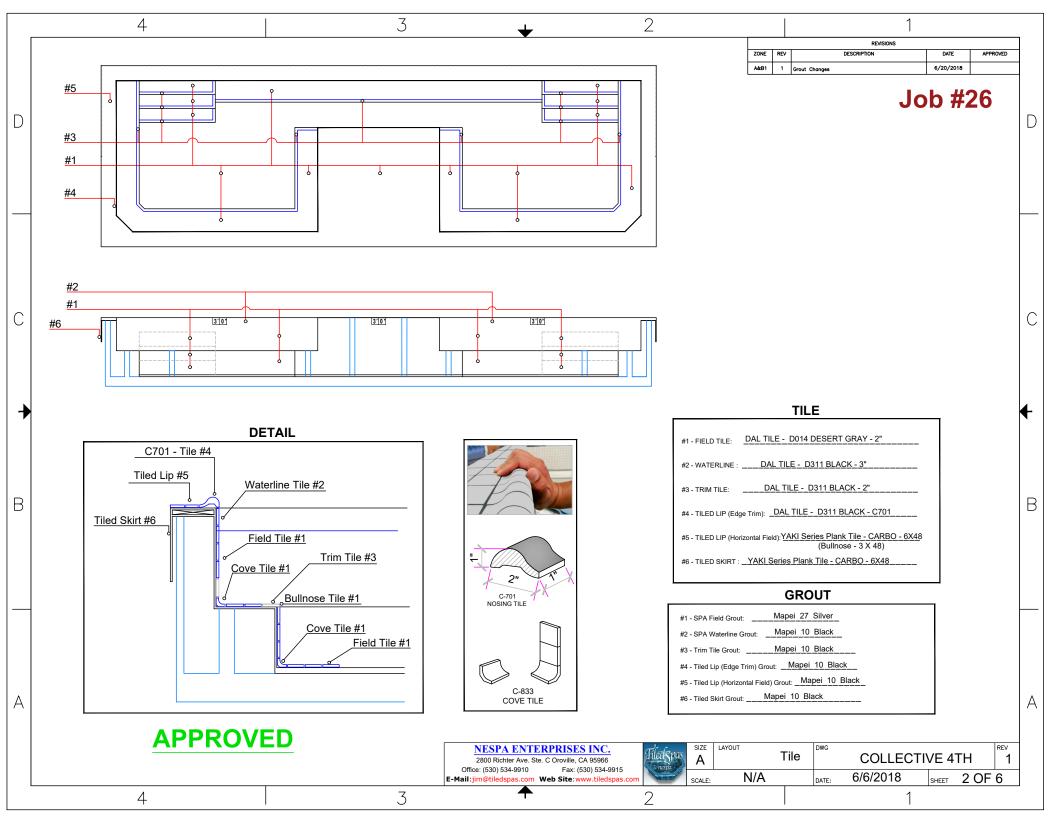
#### **D. SPA LIGHT:**

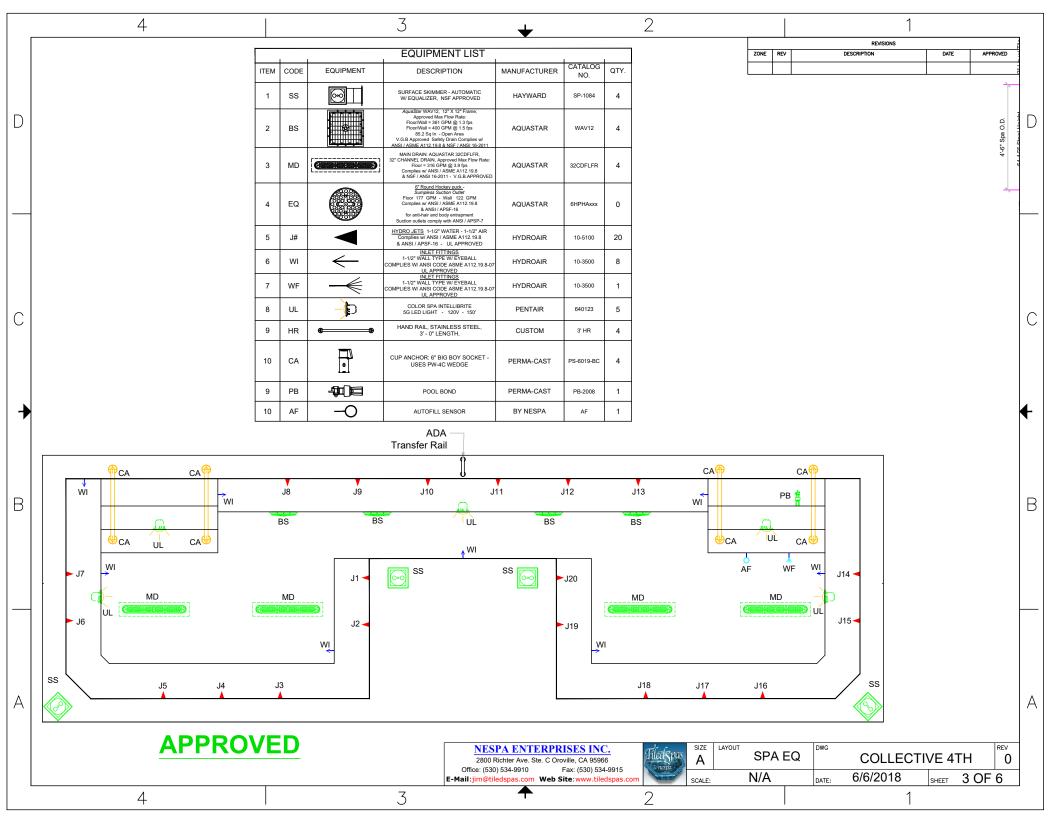
1) Spa light has to be on GFCI circuit. It is controlled at spa side with ON/OFF.

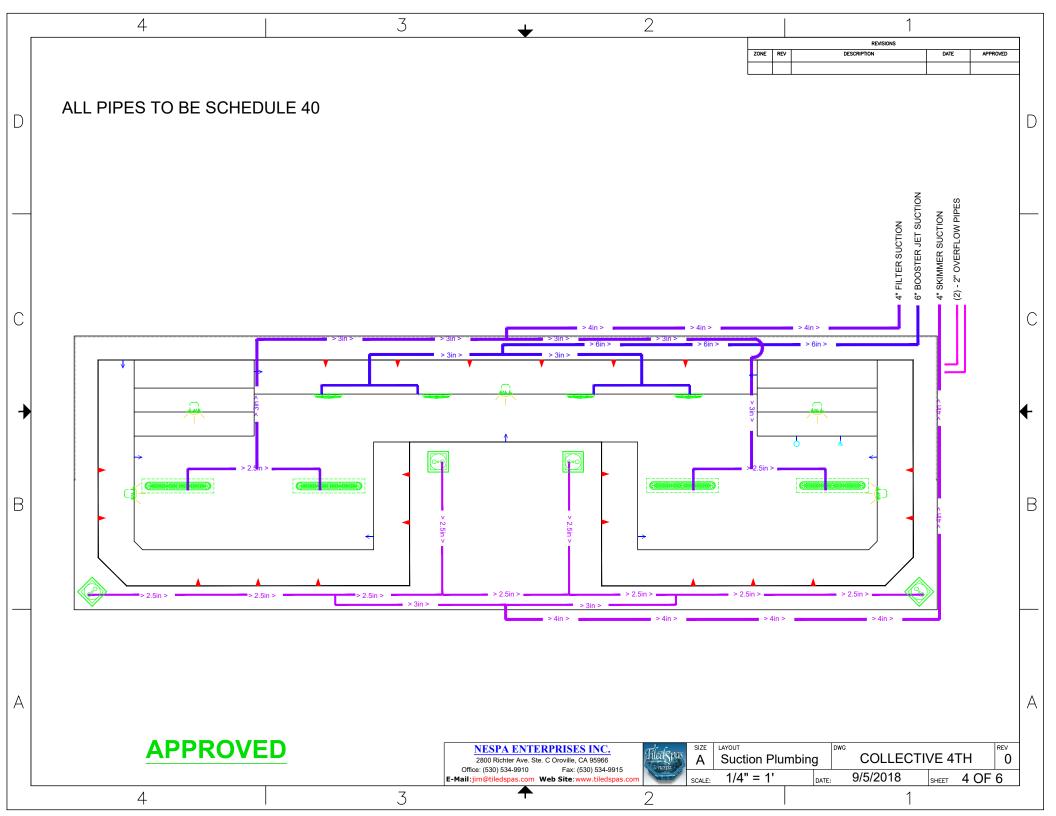
#### **E. TILE SERVICING:**

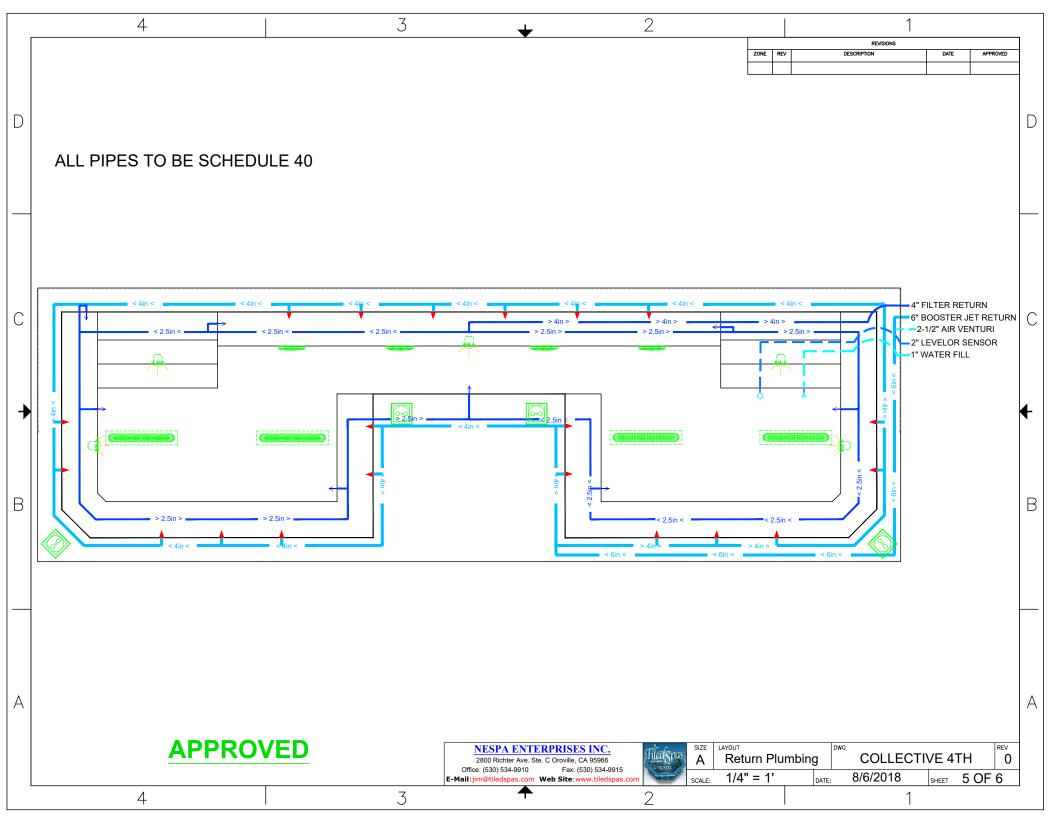
1) Contact manufacture when servicing tile or grout. @ (530) 534-9910

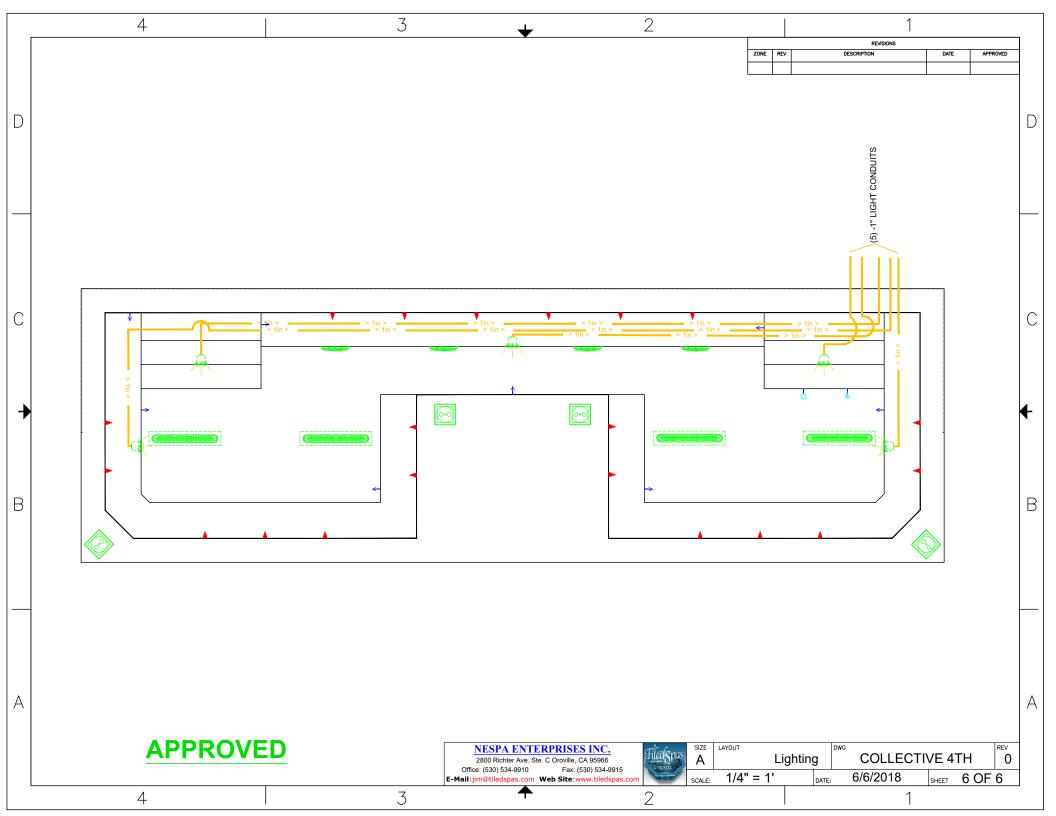


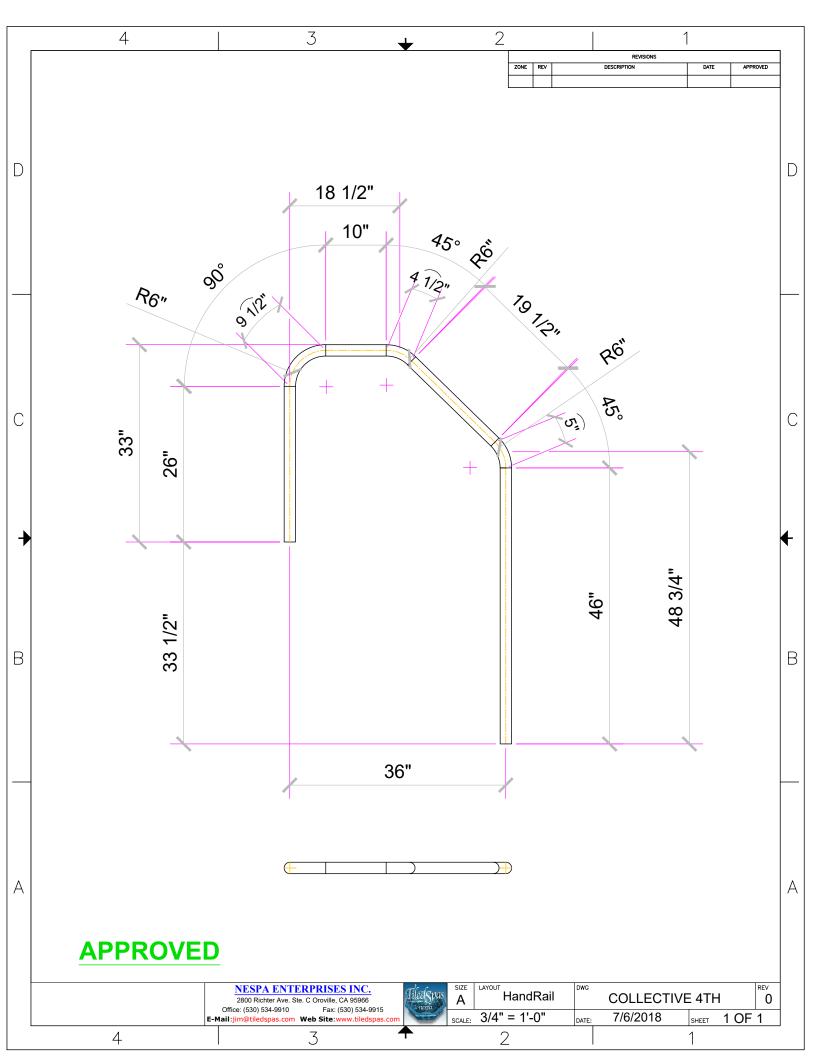




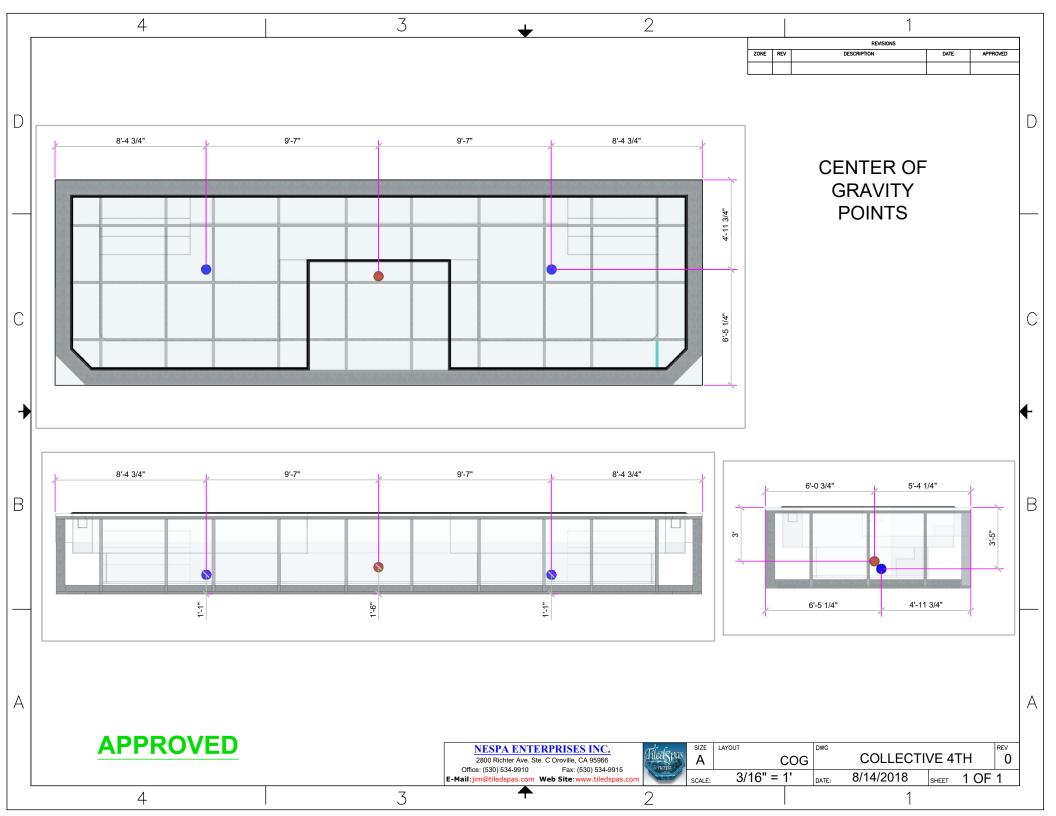


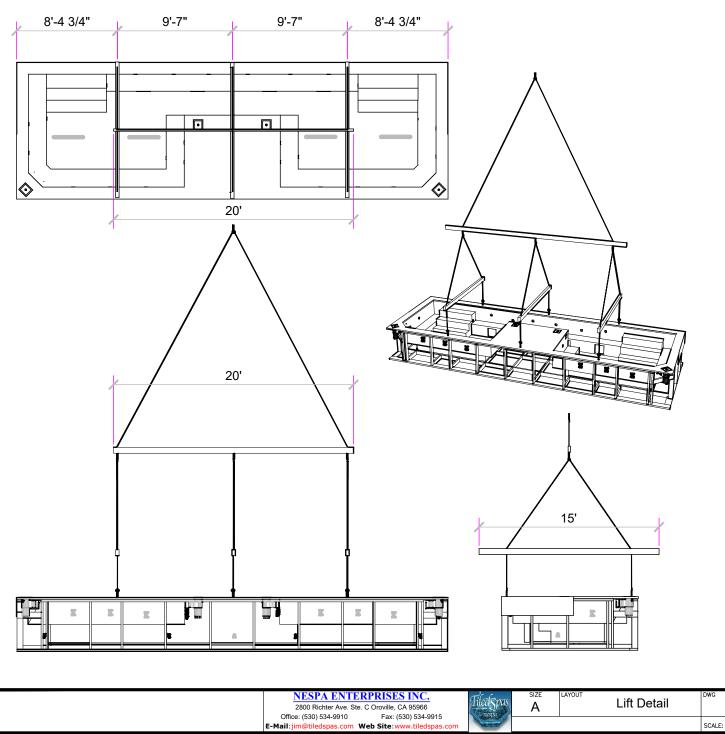












Dimensions: Pool 11'-5" Wide X 35'-11.5" Long x 4'- 6" Tall Dry Weight: Pool 15,000 lbs. Rigging Weight: TBD by others

There will be six lifting points on top of the lip of pool. Three on either side.

Manufacturer will supply 6 inch and 1.25 x 7 threaded grade 8 alloy steel lifting eye bolts that will thread into the design lifting points. Typical lifting capacity is 20,000 pounds any straight pull.

Is recommended to use (3) 15 foot long x 10 ton capacity spreader beams across the unit to the lifting eyes using two (2) 6.5 ton shackles and one (1)  $5/8^{\circ}$  x 3' long steel chokers at each eyebolt in a straight pull to the underside of the spreader beam.

Connect a 20' - 20 ton capacity lifting beam perpendicular to the three 15' spreader beams using (6) 5/8" x 10' steel chokers and twelve (12) 6.5 ton shackles.

The 20' x 20 ton spreader beam will be connected to the Crane book using two 1" x 20' long steel chokers connected to the beam with two (2) 12 ton shackles. Total weight of the four beams and rigging will be approximately 3600 pounds.

**COLLECTIVE 4TH** 

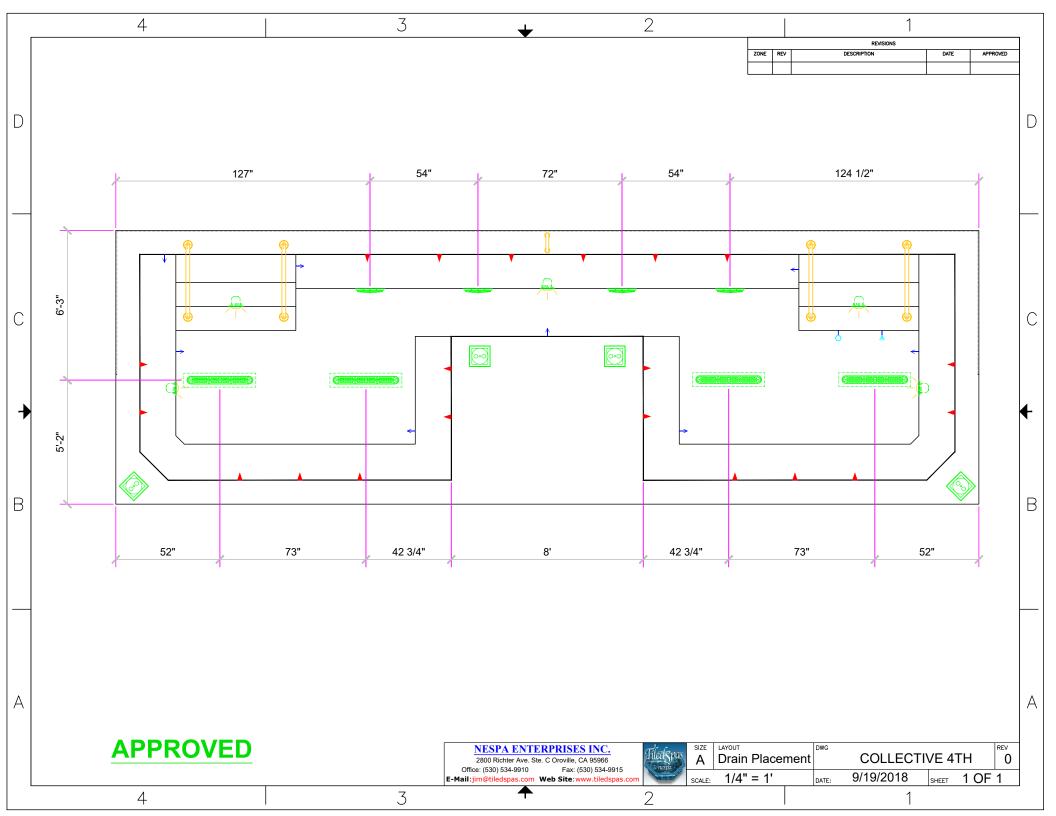
1/8" = 1' DATE: 10/31/2018 SHEET

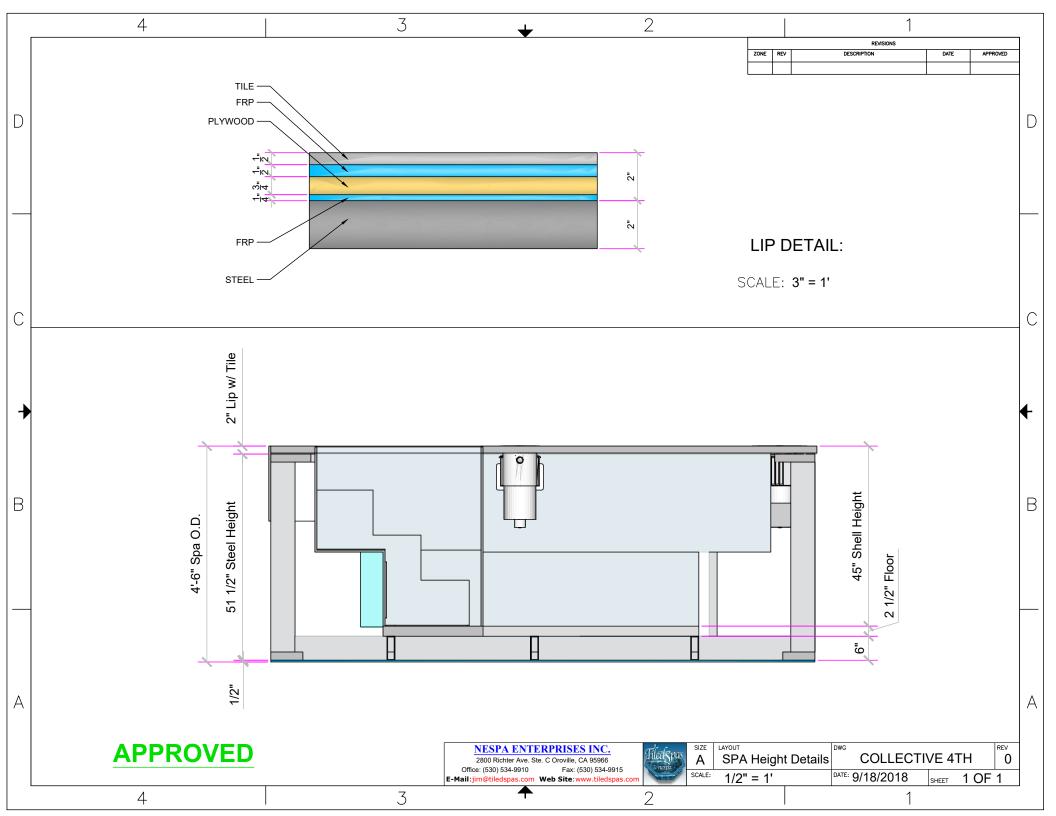
#### **APPROVED**

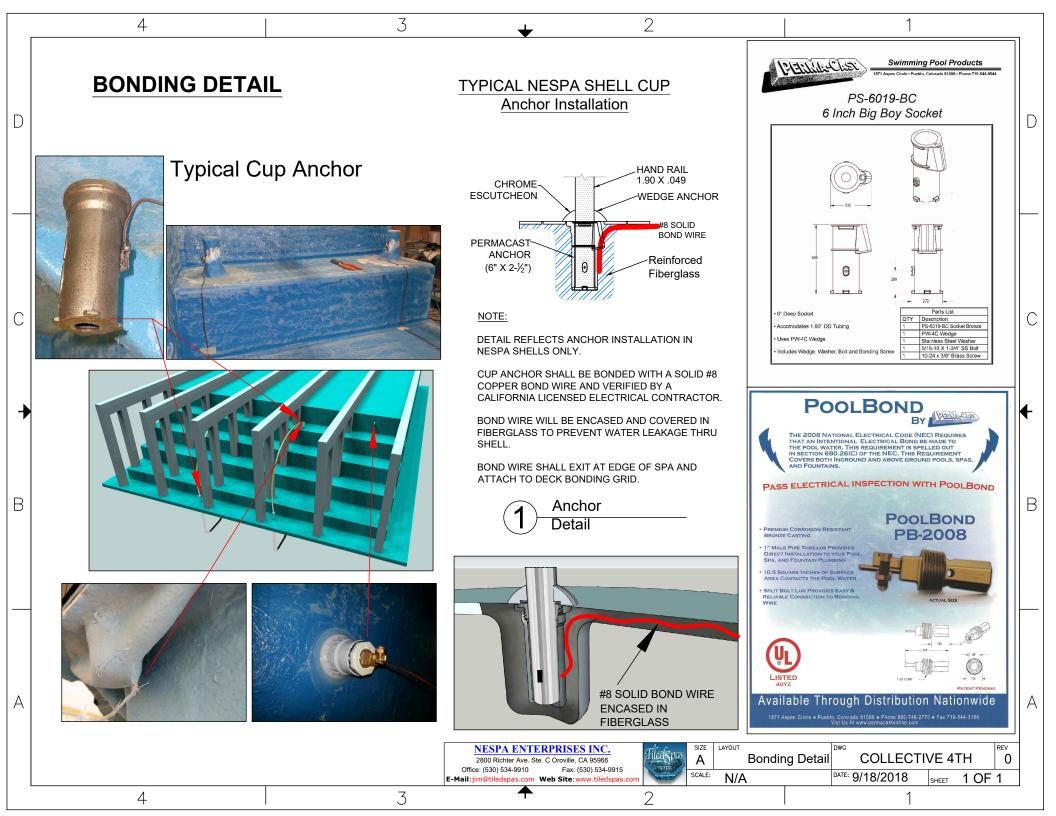
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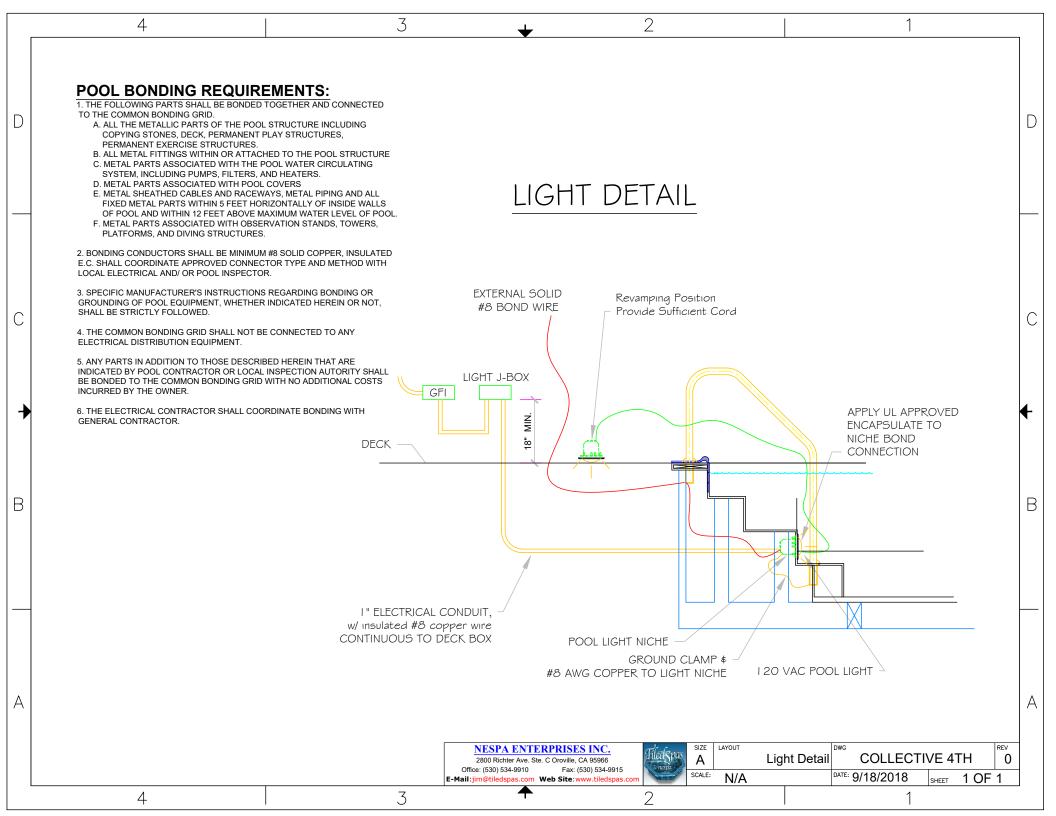
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1 OF 1









#### STANDARD NESPA IN-GROUND INSTALLATION INSTRUCTIONS SET-UP AND EXCAVATION

**Prerequisites**: Before installing your Nespa spa. You may be required to acquire a permit from your local State, County, and City building dept and or Health department. (Commercial jobs need Health Dept. Approval). Your spa installation must comply with the most current codes. (Uniform Swimming **Pool, Spas & Hot Tub Code 2006 ( USPC 2006).** 

**Spa drawings:** Request from Nespa a current spa specific construction detail, plan and section, spa plumbing detail.

**Delivery Access**: Clearly determine the method of getting the spa to jobsite and into the hole. This may require the use of a crane, forklift, hoist, backhoe and/or manpower etc.

1) The following instructions are general guidelines and may not apply to your specific jobsite conditions. When excavating for your spa remember to provide for plumbing and light connection clearances. In order to determine how to excavate for your spa or swim spa, measure spas outside dimension (O.D.) and add minimum 3" to all sides. This 3" clearance is to accommodate jet and suction plumbing. This 3" clearance can change or be reduced upon request. Note: skimmer location, this area may have to be larger than 3", if commercial 22".

- 2) Freeze Climates- If the spa is place into a vault (typical of freeze climates) a standard 18" or more of clearance minimum from spa perimeter should be provided. This dead air space is for possible future access to spa plumbing in case of a freeze. Area drain is mandatory. Ask your local installer for his experienced opinion. Do not hesitate to call us because we want to be sure that your installation progresses as smoothly as possible. If you have questions call us. (888) 479-4677.
- 2) **Hole depth** is determined by spa's outside height dimension. This height may vary depending if spa has skids or no skids. The spa lip may be finished or non- finished. How is the perimeter deck elevation transitioning to the spa? Focus on the finish surrounding deck elevations, thickness of the finish material on spa upper horizontal lip, equal to lip or under the spa lip. This material can be tile, stone, concrete or brick.
- 3) **Preplumb** the spa before it goes into the hole. If there are needs for electrical, bonding or control conduits run them as well before dropping in hole. Connect bond wire to niche would be best.

### 4) Spa should sit on level 3 <sup>1</sup>/<sub>2</sub>" thick reinforced concrete pad. Sweep debris off pad prior to dropping in hole.

5) **Install spa** into the hole on top of concrete pad. Use the Eye bolts provided for crane, forklift etc. rigging. Do not hold onto pipes. Use caution with suction and jet plumbing when lowering into hole. DO NOT STRESS FITTINGS! Fill Spa with water and check for leaks prior to backfill.

- 6) Check site reference points for proper spa positioning (i.e., squaring to house, garage, etc.).
- 7) Shim to level spa. Shim with non-compression able material. Re square to house, or ref. point.
- 8) Dry pack with cement the gaps that have been created when shimming spa level.
- 9) Connect pipes to tees if spa is preplumb. Installers properly support your new plumbing from stressing spas preplumb fittings. After electrical conduit and bond wire is connected to light niche, water test spa before back filling with sand. NOTE: All Nespa products are water tested prior to leaving factory.

#### **ELECTRICAL:**

- 1) All electrical connections to spa or equipment should comply with the most recent national electrical code (NEC), state and local codes.
- 2) Connect electrical conduit to light niche. This work should be done or reviewed by a licensed electrician.
- 3) To install spa light you will need to include inside the PVC conduit to the light niche a solid #8 coated copper wire. (If you are use brass conduit, internal bond wire is not required.) This bond wire should be pulled with the light cord at the same time. This bond wire needs to be attached to the internal bonding lug of the light niche. An approved encapsulate should be applied to bond wire connection in niche.
- 4) An external #8 copper wire shall be connected to the external bonding lug on the rear of the light niche. This copper wire can then be used for additional bonding requirements (i.e., handrails or any other metallic object within 5' of the spa.

#### **PLUMBING:**

- 1) When plumbing a Nespa it is important to properly size the plumbing. We highly recommend that you follow the pump manufacturer's pipe sizing requirements and Uniform Swimming Pool, Spas & Hot Tub Code 2006 (USPC 2006). This code book is available at <u>www.IAPMO.org</u> or (909) 472 4100.
- 2) The jet air venturi should be a Hartford loop design adjacent to spa shell and air entry point can be located next to spa or remotely at equipment.
- 3) Fill spa with water and test the system for leaks PRIOR to backfilling with sand.

#### SAND BACK FILL:

- 1) With water in spa, back-fill around spa perimeter with dry plaster sand and wet wash with hydraulic attachment to hose. Let set for one hour and hydraulic dry again. Be sure water level in spa is at the highest level. Any questions please call us. (888) 479-4677.
- 2) If spa is free standing on elevated deck or a structure, it is important to fill spa with water and load area prior to installing coping or perimeter decking. If spa is installed in a vault situation a area drain is needed.



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#### **NESPA ENTERPRISES, Inc. LIMITED WARRANTY**

This LIMITED WARRANTY covering NESPA products is extended to the ORIGINAL PURCHASER-USER BY NESPA ENTERPRISES Inc.(NESPA), 2800 Richter Ave. Unit C California 95966.

NESPA products are thoroughly inspected and tested prior to factory shipment. NESPA warrants to the ORIGINAL PURCHASER-USER that NESPA Spas and Swim Spas will be free of defect in workmanship, accessories and parts, provided said accessories and parts were manufactured by NESPA. NESPA, under this LIMITED WARRANTY, warrants only that its Spas and Swim Spas shall be structurally sound, shall retain their shape, and shall retain water for the warranty period. NESPA warrants the adhesion of tile to fiberglass for a period of three (3) years and structural soundness for ten (10) years. NESPA warrants epoxy grout adhesion for a period of three years. If any such defects appear and are reported within the warranty period, NESPA shall repair or replace such defective parts without charge if an inspection proves the claim.

The provisions of the LIMITED WARRANTY shall not apply to tile cracked, split, chipped or damaged after the product has left the factory, nor damage to tile caused by freezing nor to damage, defect, malfunction or failure to conform with the above warranty provisions where the damage, defect, malfunction or failure to conform was caused during shipment or by distributor or by unreasonable use by ORIGINAL PURCHASER-USER including improper water balance and improper sand pack or support.

This LIMITED WARRANTY shall not apply to any plumbing, equipment, or installation of spas and Swim Spas and shall not apply to any alterations made to or upon NESPA products except alterations made by NESPA employees or NESPA authorized representatives.

This LIMITED WARRANTY is expressly in lieu of all other warranties expressed or implied including the warranties of merchantability and fitness for use and all other obligations or liabilities on NESPA'S part, and NESPA neither assumes nor authorizes any other person to assume for NESPA any other liability in connection with the sale of this NESPA product. This LIMITED WARRANTY shall not apply to this NESPA product or any part thereof which has been subject to accident, negligence, alteration, abuse or misuse. NESPA makes no warranty whatsoever with respect to accessories or parts not manufactured by NESPA.

The term "ORIGINAL PURCHASER-USER" as used in this LIMITED WARRANTY shall be deemed to mean that person for whom the NESPA product is originally installed.

The LIMITED WARRANTY provided herein and the obligations and liabilities of NESPA hereunder are exclusive and are in lieu of, and buyer and original PURCHASE-USER hereby waive all other remedies, warranties, guarantees or liabilities, expressed or implied, arising by law or otherwise (including without limitation and obligations of NESPA with respect to fitness, merchantability, and consequential damages) or whether or not occasioned by NESPA'S negligence.

This LIMITED WARRANTY shall not be extended, altered or varied except by a written instrument signed by NESPA and original PURCHASER-USER.



# INNOVATIONS IN POOL AND SPA LIGHTING At day's end, let the magic begin with

the world's leader in underwater lighting

#### Quantities- 2 per spa 4<sup>th</sup> & 15<sup>th</sup> Floor

## MAKE WATER COME ALIVE WITH ENERGY-EFFICIENT, UNDERWATER POOL AND SPA LIGHTING

Pentair underwater lighting continues to set new standards in energy efficiency, reliability and performance. We offer the most energy-efficient LED lighting technology available, as well as traditional incandescent and halogen options to add brilliance, mood and relaxation to any nighttime underwater environment.

#### INTELLIBRITE® 5G UNDERWATER COLOR-CHANGING LED POOL AND SPA LIGHTS

IntelliBrite Underwater 5g Color-Changing Pool and Spa Lights feature LED technology for the best in energy efficiency, lifetime value and quality of light. The IntelliBrite 5g light

mixes and matches individual LED colors to achieve a vibrant spectrum of color<sup>\*</sup> that can cycle at varying speeds and in different color sequences. Combined with a custom

reflector and innovative lens design, the IntelliBrite 5g light is the most energyefficient underwater LED light available.

 Custom reflector and superior lens geometry eliminate "hot spots" and improvecolor effects.

- Compatible with IntelliTouch<sup>®</sup> or EasyTouch<sup>®</sup> Control Systems for centralized, fully automated control.
- Outstanding energy efficiency—

consuming only 26 watts for pool lights and 18 watts for spa lights.

- UL Listed when installed in Pentair niches.

IntelliBrite 5g Underwater White LED Pool Lights deliver pure, white light the most efficient way.

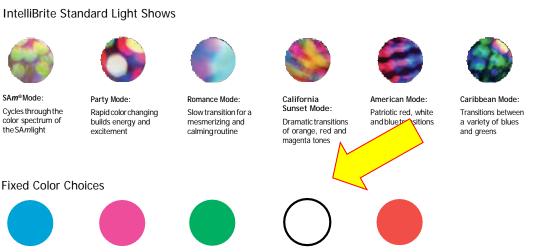
 Pure, white light uses 89% less energy than incandescent lights.

- Superior light intensity and distribution no hot spots orglare.
- Long-lasting durability.
- The most efficient lighting technology

available-an Eco Select® brand product.



Products aligned with the Eco Select brand are the most environmentally responsible choices within the Pentair product family.



Green

White

Red

#### IntelliBrite Standard Light Shows

Magenta



Blue

Roval Mode: Cycle that selects

only rich, deep

tones of color



IntelliBrite 5g Pool and Spa Lights



Amerlite Incandescent Light and Lens Covers



AmerBrite LED Replacement Lamp for Amerlite Housing



#### AMERLITE® INCANDESCENT LIGHTS

The world standard of reliability for underwater pool and spa lighting for decades, Amerlite systems light more than 3 million pools around the world.

- 8-1/8" prismatic tempered glass lenses for optimum light diffusion.
- Create different moods with optional snap-on lens covers in blue, red, green and amber.
- · Heat-sensing cutoff for low water protection.
- Optional plastic snap-on face rings let you coordinate with your pool's finish.
- Allow bulb changes without lowering your water level.
- UL Listed when installed in Pentairniches.

#### AMERBRITE<sup>®</sup> LED REPLACEMENT LAMP FOR THE AMERLITE LIGHT SERIES

Bring the luminous splendor of LED technology to the best-selling Amerlite light series without the hassle and cost of replacing your existing Amerlite light fixture. Your installer can simply unscrew your inefficient, high-wattage incandescent bulb and screw in a high-efficiency AmerBrite LED lamp. You'll experience the efficiency of today's best pool lighting technology and watch your pool transform into a rejuvenating spectrum of breathtaking color or vibrant white light.

- The most efficient LED replacement pool lamp on the market.
- AmerBrite color lamps use 36 watts of power, while white lamps use between 34–51 watts.
- Color lamps feature five brilliant, fixed colors and seven dazzling, preprogrammed light shows.
- Superior reflector design creates more uniform light distribution.
- Adjustable to provide wide or narrow beam pattern.
- Solid-state LED technology provides longer life.



#### AQUALIGHT® HALOGEN LIGHTS AND SPABRITE® INCANDESCENT LIGHTS

These compact units are designed to provide big lighting performance for smaller pools and spas. No matter which light you choose, your pool or spa will shine brilliantly when the sun goes down.

- Prismatic tempered glass lens for optimum light diffusion.
- Heat-sensing cutoff for low water protection.

- Stainless-steel clamp for quick and easy bulb replacement.
- Plastic snap-on face rings available to coordinate with your pool's finish.
- Optional blue, magenta, green, purple and blue-green, mood-setting, snap-on lenses.
- SpaBrite lights available in 120V halogen and 12V incandescent options.
- UL Listed when installed in Pentair niches.



#### AQUALUMIN® III NICHELESS LIGHT

The AquaLumin III Nicheless Light is the third generation of the industry's first and only nicheless light for swimming pools, offering luminous, double-contact halogen quartz lighting. With its revolutionary and innovative design, the AquaLumin III light mounts directly on the pool wall for simple installation in vinyl pools. Plus, it's the perfect choice for adding nighttime brilliance to new or existing pools.

#### LIGHT SELECTION GUIDE

	White LED Light		Incandescent Light		Halogen Light		
	IntelliBrite 5g	IntelliBrite 5g Spa	Amerlite	SpaBrite	AquaLight	AquaLumin III	SpaBrite
Size of Light	Large	Small	Large	Small	Small	Small	Small
120V Wattage	55W (equivalent to 500W)	18W	300W 400W 500W	N/A	100W 250W	250W	60W
12V Wattage	55W (equivalent to 500W)	18W	100W 300W	100W	75W	100W	N/A



## USE LANDSCAPE LIGHTING TO CREATE A DIFFERENT WORLD

The lighting effects you can achieve outside of the water are just as important as what's in the pool. You can transform your entire poolscape into a harmonized nighttime environment that draws you and your guests into a different world. Relaxing and letting go are simply easier and more rewarding.

#### INTELLIBRITE® COLOR-CHANGING LED LANDSCAPE LIGHTS

Simply the most dramatic and energy-efficient lighting option available today, IntelliBrite Color-Changing LED Landscape Lights can match your underwater pool and spa lighting, your mood or any special event. Standard features include:

- Versatile, adjustable, compact, medium floodlight design in matte black finish.
- Choose from two levels of brightness.
- Easily connects to standard 12V transformer.
- The most efficient lighting technology available—LED lights consume less energy than traditional landscape lighting systems.
- Same color shows and fixed colors as IntelliBrite 5g Color-Changing Pool and Spa Lights. Can be synchronized for coordinated or complementary lighting effects!

## BRING FOUNTAINS TO LIFE WITH DAZZLING COLOR

When combined with IntelliBrite 5g Underwater Color-Changing LED Pool and Spa Lights, Pentair Fountain Fixtures will bathe fountains in a constantly changing spectrum of color.

- Sturdy cast bronze construction with attractive natural bronze finish.
- Base and yoke-mount rotate 360° and pivot 180° to point light in any direction.
- Strain-relief helps protect wiring connections, assuring long life.
- Integrated bonding lug for electrical safety.
- Rock guard is available for any Pentair light and niche.
- UL Listed when used with Pentairlights.



IntelliBrite Color-Changing LED Landscape Lights



IntelliBrite 5g Color-Changing LED Lights in Fountain Fixtures

## ADD THE MAGIC OF COLOR TO WATER FEATURES

Many Pentair products let you create exciting, intriguing effects combining motion and color. They add life to the night and make your pool environment a place to remember.

#### GLOBRITE<sup>®</sup> POOL AND SPA LED LIGHTING HIGHLIGHTS YOUR

#### POOL'S SHAPE AND DETAILS

When you install GloBrite lighting in a poolscape, poolside evenings go from great to spectacular. GloBrite lights are the creative, cost-effective way to showcase and define your pool's curves and linear runs and their relationships with the overall poolscape. Plus, they enhance pool features like baja shelves, steps, beach entries and other water features.

GloBrite lights utilize the industry's most advanced technology for bright, energyefficient lighting—while using less energy than comparable pool and spa lights.

- The most efficient LED lights available.
- Five brilliant, fixed colors and seven dazzling, preprogrammed light shows.
- The perfect complement to IntelliBrite<sup>®</sup> 5g Underwater Color-Changing LED Pool and Spa Lights for dynamic, synchronized-color light shows.
- UL Listed.



GloBrite Pool and Spa LED Light

#### MAGICSTREAM<sup>®</sup> LAMINARS: CRYSTAL CLEAR BY DAY, DRAMATIC COLOR AT NIGHT

MagicStreamLaminars create totally clear, uniform arcs of moving water that originate from either your pool deck or surrounding landscape. At night, these translucent streams of water are brilliantly colored with an LED light source. The result is a water effect that adds an elegant bit of entertainment to your poolscape.

MagicStream Laminars feature the same fixed colors and preprogrammed light shows utilized in IntelliBrite LED technology and can be coordinated for complimentary lighting effects.

- Water arcs reach up to seven feet high and project out eight feet into your pool, spa or other water feature
- Flush installation to your deck or other surface; no unsightly or unsafe edges, just the magic of water erupting from a hidden source.
- The MagicStream Laminar uses a microprocessor-controlled, colorchanging LED lighting system to hold a steady color or scroll through colors using three distinct programs.
- For a more enriched nighttime experience, a solenoid is integrated into the LED system to add a bright spot of light as it follows the arc into the pool or spa.





#### COLORCASCADE® LED LIGHT BUBBLERS MAKE YOUR POOL COME ALIVE

The ColorCascade bubbler is a vivid mix of color-changing LED lighting and fountainlike water movement. Whether you're in the mood to relax or entertain, ColorCascade bubblers are the perfect way to showcase and enhance pool features like sun shelves, steps and beach entries. Their low voltage and minimal water flow requirements make them an ideal, energy-efficient addition to pools, fountains, ponds and more. Plus, they add eye-catching style and soothing sound to heighten your senses and elevate your aquatic experience.

- Energy-efficient color LED lights—features five vibrant colors and seven dazzling light shows.
- Perfectly synchronizes with IntelliBrite 5g Underwater Color-Changing LED Pool and Spa Lights.
- Compatible with IntelliTouch® and EasyTouch® Control Systems.
- Optional IntelliBrite Controller provides fast, easy light control for pools and spas without automation systems.
- · Low flow requirements allow for multiple units per pool.
- PVC niche provides for flush mounting.
- Designed for 2"-10" water depth.
- Low voltage operation—12 VAC/16 W.



#### THE PERFECT LIGHT FOR WADING POOLS AND SHALLOW AREAS

The HiLite<sup>®</sup> Halogen Quartz Plastic Light is a high-intensity, low-voltage light that disperses a soft, pleasing illumination. The HiLite light is ideal for wading pools, shallow pool areas, beach entries and steps. Red and blue Kwik-Change<sup>™</sup> Lenses make it easy to change colors to suit your style or mood.

- The first UL Listed light for installation in as little as four inches depth below the water's surface.
- Heat-sensing cut-off feature prevents overheating when water level is low.
- Soft and even light distribution.
- Simple, two-wire connection for fast installation.
- Twists open for easy bulb replacement.
- Face ring available in white, gray or black.
- Corrosion-proof, all-plastic housing and lens for long life.



ColorCascade LED Light Bubbler

HiLite Halogen Quartz Light



#### AUTOMATION SYSTEMS THAT PUT YOU IN CONTROL OF YOUR LIGHTING

For the ultimate in convenience and control, consider an IntelliTouch® or EasyTouch® Control System. You can program and automate light shows from home or on the go with our many options, including an indoor control panel and wireless remote. For even greater control, add an optional ScreenLogic® Interface to your Pentair automation system and access your pool from practically anywhere and at any time using your smartphone, computer or mobile digital device.

The IntelliBrite® Color-Changing LED Lighting Controller offers pool and spa owners without

an automation system fast, easy switching to their favorite color modes. This accessory was designed exclusively for IntelliBrite Underwater Color-Changing Pool and Spa Lights.

Interface





EasyTouch Wireless Remote

IntelliTouch ScreenLogic Control System



IntelliBrite Lighting Controlle

#### MAKE MAGIC AT NIGHT WITH THE WORLD'S MOST POPULAR LIGHTING CHOICES FOR MORE THAN 40 YEARS

Ask your pool professional to help you select the Pentair lighting system that will take your poolscape from fun during the day to fantastic at night.

**AVAILABLE FROM:** 



1620 HAWKINS AVE, SANFORD, NC 27330 800.831.7133 WWW.PENTAIRPOOL.COM

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pumps · filters · heaters · heat pumps · automation · lighting · cleaners · sanitizers · water features · maintenance products

Old Style Poly Jets



210-5830

210-5860

210-5870



Poly Jet Body Assemblies						
Part No.	Description	Case Quantity				
210-5830	1" S Water x 1" S Air – No Top Plug	40				
210-5860	Tee Body – 1 1/2" S Water x 1" S Air – with Top Plug	30				
210-5870	Ell Body – ¾" SB Water x 3/8" RB Air	60				
210-5910	Ell Body – ¾" S Water x 3/8″ RB Air	60				
210-5950	Straight Body -1 1/2" S Water x 1/2" / 1" Spigot Air	60				
210-5937	NEW Metric Jet Body – 50mm Water x 20mm Air	60				
210-9500	32mm Water x 32mm Air	30				

All Poly Jet body assemblies include a body and wall fitting.





711-1750



916-1250

711-1730



218-1770A

Old Style Poly Jets

Poly Jet Accessories							
Part No.	Description	Case Quantity	Case Quantity				
711-1730	Grommet Gasket	1400					
711-1750	Standard Gasket (Thin)	500					
711-4750	3/16" Gasket (Thick)	500					
916-1250	Escutcheon – Stainless Steel (Standard Poly Jets only)	3					
218-1770A	Wrench/Test Plug with O-Ring Assembly	150					
805-0132	Wrench O-Ring	25					

Spa Packs & Swim Spa

Air Injectors & Blowers

Drains & Suctions

Filters & Skimmers

Ells/Tees/Wyes

Air Controls

#### **Products**

#### Pool

Air Systems Chlorinators Drains & Suctions Filters & Filter Systems Gunite Jets

## Jets

#### Company Information

Contact Us Find a Distributor News Hose & TubingWet Ends & BasesPumpsWhite GoodsSkimmers & Skim FiltersUnionsValvesValves

#### Resources

Drain Cover Safety Help & Support FAQ Find a Sales Rep Marketing Materials Recall Rebates Careers

#### Location

2200 East Sturgis Road Oxnard, California 93030

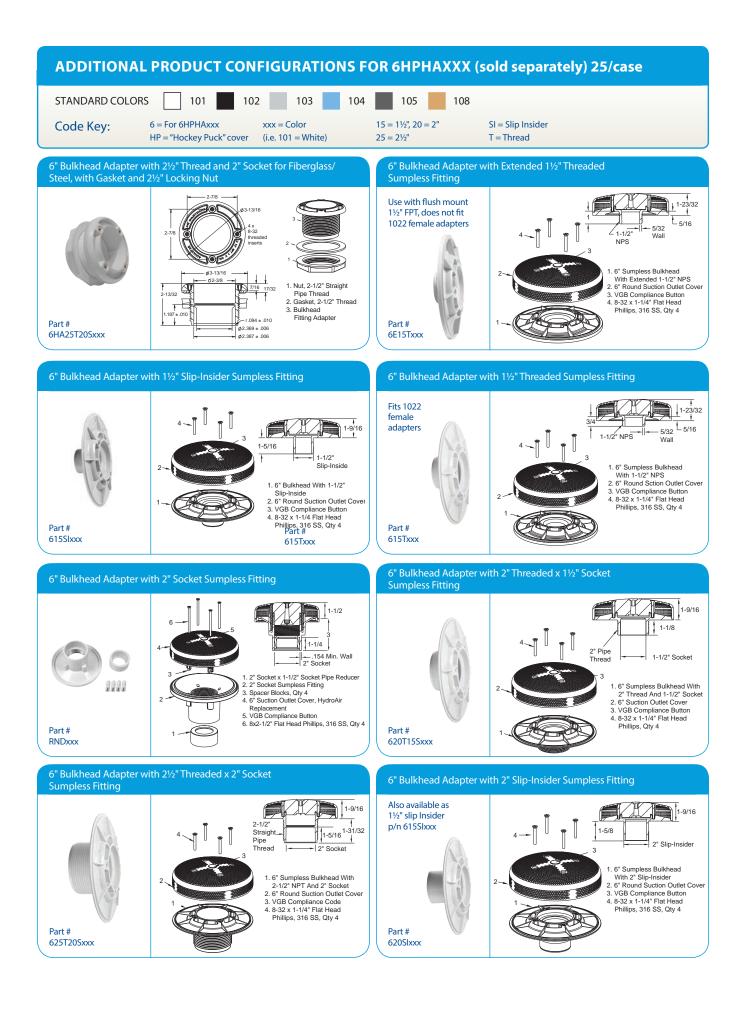
Phone: 805-981-0262 Fax: 805-981-9403 Toll Free Fax: 888-SPA-JETS (888-772-5387) Hose & Tubing Jets Lighting Manifolds Pumps & Bases Slice & Gate Valves Speakers Top Side Valves Unions Water Features

FE

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#### 6" ROUND HOCKEY PUCK SUMPLESS SUCTION OUTLET COVER, HYDROAIR/ITT REPLACEMENT

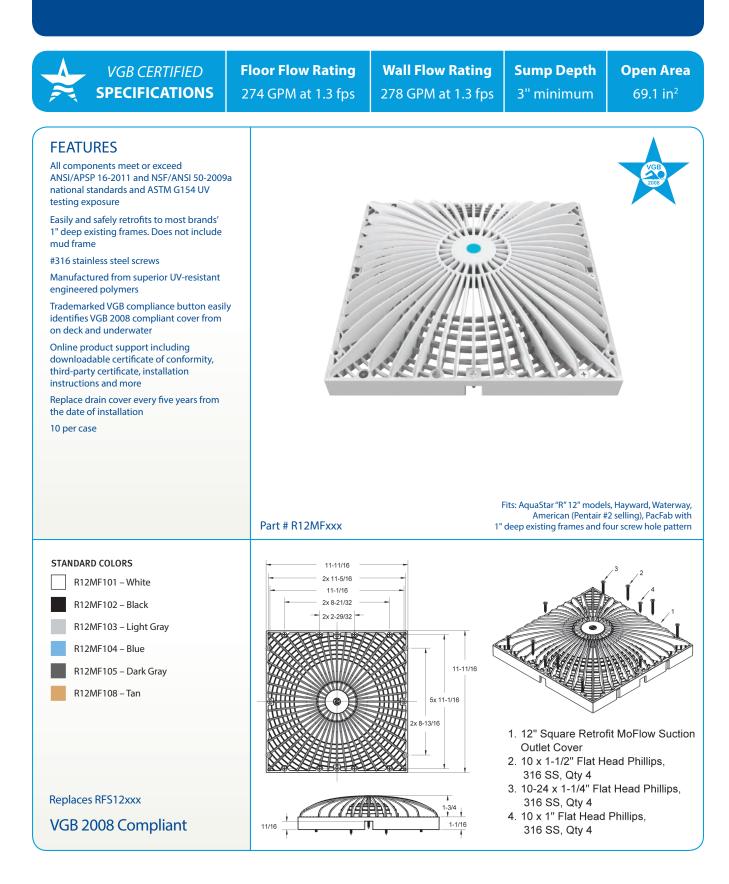




#### 32" CHANNEL DRAIN FLAT GRATE ANTI-ENTRAPMENT SUCTION OUTLET COVER AND PVC THREE-PORT MANUFACTURED SUMP

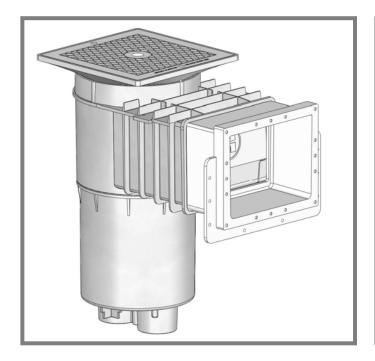


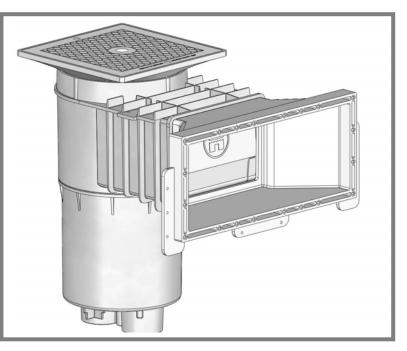
#### 12" SQUARE RETROFIT MOFLOW<sup>™</sup> SUCTION OUTLET COVER



## **HAYWARD<sup>®</sup>** SERIES AUTO-SKIM<sup>TM</sup> by HAYWARD<sup>®</sup>

#### **Owner's Manual**





#### AUTOMATIC SURFACE SKIMMER

Models SP1084-SP1085

#### **IMPORTANT SAFETY INSTRUCTIONS**

Basic safety precautions should always be followed, including the following: Failure to follow instructions can cause severe injury and/or death.

This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

A WARNING warns about hazards that **could** cause serious personal injury, death or major property damage and if ignored presents a potential hazard.

**A** CAUTION warns about hazards that will or can cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe.

The **NOTICE** label indicates special instructions that are important but not related to hazards.

Hayward Pool Products 620 Division Street, Elizabeth, NJ 07207 Phone: (908) 351.5400 www.haywardnet.com





**WARNING** - Read and follow all instructions in this owner's manual and on the equipment. Failure to follow instructions can cause severe injury and/or death.

#### A WARNING – Suction Entrapment Hazard.

Suction in suction outlets and/or suction outlet covers which are, damaged, broken, cracked, missing, or unsecured can cause severe injury and/or death due to the following entrapment hazards:

Hair Entrapment- Hair can become entangled in suction outlet cover.

**Limb Entrapment**- A limb inserted into an opening of a suction outlet sump or suction outlet cover that is damaged, broken, cracked, missing, or not securely attached can result in a mechanical bind or swelling of the limb.

**Body Suction Entrapment**- A negative pressure applied to a large portion of the body or limbs can result in an entrapment. **Evisceration/Disembowelment** - A negative pressure applied directly to the intestines through an unprotected suction outlet sump or suction outlet cover which is, damaged, broken, cracked, missing, or unsecured can result in evisceration/ disembowelment.

**Mechanical Entrapment**- There is potential for jewelry, swimsuit, hair decorations, finger, toe or knuckle to be caught in an opening of a suction outlet cover resulting in mechanical entrapment.

#### A WARNING - To Reduce the risk of Entrapment Hazards:

- When outlets are small enough to be blocked by a person, a minimum of two functioning suction outlets per pump must be installed. Suction outlets in the same plane (i.e. floor or wall), must be installed a minimum of three feet (3') [1 meter] apart, as measured from near point to near point.
- o Dual suction fittings shall be placed in such locations and distances to avoid "dual blockage" by a user.
- o Dual suction fittings shall not be located on seating areas or on the backrest for such seating areas.
- o The maximum system flow rate shall not exceed the flow rating of as listed on Table 1.
- o Never use Pool or Spa if any suction outlet component is damaged, broken, cracked, missing, or not securely attached.
- o Replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.
- o In addition two or more suction outlets per pump installed in accordance with latest ASME, APSP Standards and CPSC guidelines, follow all National, State, and Local codes applicable.
- o Installation of a vacuum release or vent system, which relieves entrapping suction, is recommended.

WARNING – Failure to remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets can result in an increase potential for suction entrapment as described above.

WARNING – Failure to keep suction outlet components clear of debris, such as leaves, dirt, hair, paper and other material can result in an increase potential for suction entrapment as described above.

WARNING – Suction outlet components have a finite life, the cover/grate should be inspected frequently and replaced at least every ten years or if found to be damaged, broken, cracked, missing, or not securely attached.

A CAUTION – Components such as the filtration system, pumps and heater must be positioned so as to prevent their being used as means of access to the pool by young children.

A WARNING – Never operate or test the circulation system at more than 50 PSI.

WARNING – Never change the filter control valve position while the pump is running.

**WARNING** – To reduce risk of injury, do not permit children to use or climb on this product. Closely supervise children at all times. Components such as the filtration system, pumps, and heaters must be positioned to prevent children from using them as a means of access to the pool.



**WARNING** – Hazardous Pressure. Pool and spa water circulation systems operate under hazardous pressure during start up, normal operation, and after pump shut off. Stand clear of circulation system equipment during pump start up. Failure to follow safety and operation instructions could result in violent separation of the pump housing and cover, and/or filter housing and clamp due to pressure in the system, which could cause property damage, severe personal injury, or death. Before servicing pool and spa water circulation system, all system and pump controls must be in off position and filter manual air relief valve must be in open position. Before starting system pump, all system valves must be set in a position to allow system water to return back to the pool. Do not change filter control valve position while system pump is running. Before starting system pump, fully open filter manual air relief valve. Do not close filter manual air relief valve until a steady stream of water (not air or air and water) is discharged.



**WARNING** – Separation Hazard. Failure to follow safety and operation instructions could result in violent separation of pump and/or filter components. Strainer cover must be properly secured to pump housing with strainer cover lock ring. Before servicing pool and spa circulation system, filters manual air relief valve must be in open position. Do not operate pool and spa circulation system if a system component is not assembled properly, damaged, or missing. Do not operate pool and spa circulation system unless filter manual air relief valve body is in locked position in filter upper body.

#### USE ONLY HAYWARD GENUINE REPLACEMENT PARTS





WARNING - Risk of Electric Shock. All electrical wiring MUST be in conformance with applicable local codes, regulations, and the National Electric Code (NEC). Hazardous voltage can shock, burn, and cause death or serious property damage. To reduce the risk of electric shock, do NOT use an extension cord to connect unit to electric supply. Provide a properly located electrical receptacle. Before working on any electrical equipment, turn off power supply to the equipment.

**WARNING** – To reduce the risk of electric shock replace damaged wiring immediately. Locate conduit to prevent abuse from lawn mowers, hedge trimmers and other equipment.

WARNING – Electrical ground all electrical equipment before connecting to electrical power supply. Failure to ground all electrical equipment can cause serious or fatal electrical shock hazard.



**WARNING** — Do NOT ground to a gas supply line.

WARNING – To avoid dangerous or fatal electrical shock, turn OFF power to all electrical equipment before working on electrical connections.

📣 WARNING – Failure to bond all electrical equipment to pool structure will increase risk for electrocution and could result in injury or death. To reduce the risk of electric shock, see installation instructions and consult a professional electrician on how to bond all electrical equipment. Also, contact a licensed electrician for information on local electrical codes for bonding requirements.

**Notes to electrician:** Use a solid copper conductor, size 8 or larger. Run a continuous wire from external bonding lug to reinforcing rod or mesh. Connect a No. 8 AWG (8.4 mm<sup>2</sup>) [No. 6 AWG (13.3 mm<sup>2</sup>) for Canada] solid copper bonding wire to the pressure wire connector provided on the electrical equipment and to all metal parts of swimming pool, spa, or hot tub, and metal piping (except gas piping), and conduit within 5 ft. (1.5 m) of inside walls of swimming pool, spa, or hot tub. **IMPORTANT** - Reference NEC codes for all wiring standards including, but not limited to, grounding, bonding and other general wiring procedures.

**WARNING** – Risk of Electric Shock. Connect only to a branch circuit protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the circuit is protected by a GFCI.

\* **WARNING** – Risk of Electric Shock. The electrical equipment must be connected only to a supply circuit that is protected by a ground-fault circuit-interrupter (GFCI). Such a GFCI should be provided by the installer and should be tested on a routine basis. To test the GFCI, push the test button. The GFCI should interrupt power. Push reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the electrical equipment without the test button being pushed, a ground current is flowing, indicating the possibility of an electrical shock. Do not use this electrical equipment. Disconnect the electrical equipment and have the problem corrected by a qualified service representative before using.

\* **CAUTION** – This pump is intended for use with permanently-installed pools and may be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently-installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity.

#### SAVE THESE INSTRUCTIONS

#### HAYWARD<sup>®</sup> Pool Products Limited Warranty

To original purchasers of this equipment, Hayward Pool Products, Inc. warrants its skimmers to be free from defects in materials and workmanship for a period of ONE (1) year from the date of purchase, when used in single family residential applications.

The limited warranty excludes damage from freezing, negligence, improper installation, improper use or care or any Acts of God. Parts that fail or become defective during the warranty period shall be repaired or replaced, at our option, within 90 days of the receipt of defective product, barring unforeseen delays, without charge.

Proof of purchase is required for warranty service. In the event proof of purchase is not available, the manufacturing date of the product will be the sole determination of the purchase date.

To obtain warranty service, please contact the place of purchase or the nearest Hayward Authorized Service Center. For assistance on your nearest Hayward Authorized Service Center please visit us at www.haywardpool.com.

Hayward shall not be responsible for cartage, removal, repair or installation labor or any other such costs incurred in obtaining warranty replacements or repair.

The Hayward Pool products warranty does not apply to components manufactured by others. For such products, the warranty established by the respective manufacturer will apply.

The express limited warranty above constitutes the entire warranty of Hayward Pool Products with respect to its' pool products and is in lieu of all other warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose. In no event shall Hayward Pool products be responsible for any consequential, special or incidental damages of any nature.

Some states do not allow a limitation on how long an implied warranty lasts, or the exclusion of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

> Havward Pool Products 620 Division Street Elizabeth, NJ 07207

#### \*Supersedes all previous publications.

#### USE ONLY HAYWARD GENUINE REPLACEMENT PARTS



#### **INSTALLATION INSTRUCTIONS:**

The SP1084/1085 Series Auto-Skim<sup>™</sup> is a rugged and versatile automatic surface skimmer molded of non-corrosive ABS for residential or commercial installations. The SP1084/1085 is the basic skimmer unit, featuring totally corrosion-proof, body, adjustable deck collar and square access cover, self-adjusting weir, large debris basket, and multiple plumbing connections for easier installation. The optional SP1082FV Float Valve/By-Pass Assembly installs easily in the SP1084 / SP1085 basic skimmer to provide a suction outlet thru-skimmer system and an auto safety by-pass for low water conditions.

Where required for commercial installations, the SP1082FVEKIT Float Valve and Equalizer Valve Kit and cover WG1082E can easily adapt the skimmer of your choice for commercial application. Refer to illustrations for details.

#### **BASIC SKIMMER UNIT**

<u>FLOW ADJUSTMENT</u> For full flow, move Flo-Control Slide Plate to full open. To adjust flow, move Slide Plate to desired position over pump outlet.

<u>TO VACUUM</u> Remove cover and basket. Screw hose adapter into pump outlet. Fill vacuum hose with water and insert over hose adapter. Or use optional SP1106 or SP1107 Skim-Vac over basket vacuum plate.

#### SKIMMER INSTALLED WITH SUCTION OUTLET CONNECTION AND SP1082GV VALVE.

**FULL SKIM-** Place valve lever in straight-up position. Open Slide Plate. **FULL SUCTION OUTLET (SWEEP)**-Place Valve Lever in down position. Close Slide Valve

1/2 SKIM – 1/2 SUCTION OUTLET- Place Valve Lever at  $45^{\circ}$ . – Open Slide Plate 1/2. WARNING: To prevent hair or body entrapment, a suction outlet fitting conforming to ANSI/ASME A112.19.8 must be installed.

#### SKIMMER INSTALLED WITH SUCTION OUTLET CONNECTION AND FLOAT VALVE.

When used with the SP1082FV Float Valve, water is drawn by pump suction from the surface of the pool and from the suction outlet line. Flow is balanced by means of the Flo- Control Trimmer Plate under the float valve assembly. If obstruction to flow or evaporation occurs, causing a significant reduction of flow over the weir, the float will automatically snap shut. This diverts all flow to the pump from the suction outlet line and prevents possible air lock. When the pump is shut off, the float will rise back to the top of the float valve assembly, allowing for normal operation.

### <u>WARNING:</u> To prevent hair or body entrapment, a suction outlet fitting conforming to ANSI/ASME A112.19.8 must be installed.

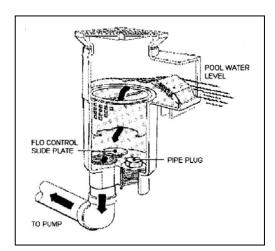
TO SWEEP / BRUSH To divert all suction to the suction outlet, simply hold the weir up above normal operating level and allow the float to "snap" shut. Or, lift out float valve assembly, close flo-control plate and replace. To reset float after sweeping, turn off pump for 10-15 seconds and allow float to rise. TO VACUUM Remove cover, basket and float valve assembly. Screw hose adapter into pump outlet. Fill vacuum hose with water and insert over hose adapter. Or use optional SP1106 Skim-Vac. If Skim-Vac is used, block off suction outlet port for maximum efficiency.

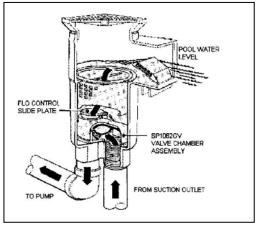
#### SKIMMER INSTALLED WITH EQUALIZER VALVE AND FLOAT VALVE

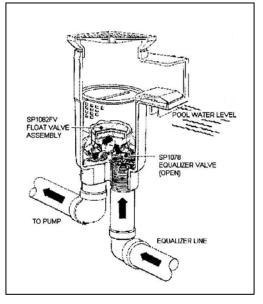
When using SP1082FVEKIT for commercial application, the Equalizer Check Valve installs over front port, and is used in conjunction with the Float Valve. If water level drops below skimmer opening, or if skimmer flow is obstructed, the float will automatically snap shut and the equalizer valve will open. This diverts all flow to the pump from the equalizer line and prevents airlock in the pump. When the pump is shut off, and the water level condition is corrected, the float will rise and the equalizer valve will close, allowing normal skimming operation when the pump is restarted.

WARNING: To prevent hair or body entrapment at the skimmer equalizer, a equalizer wall or a suction outlet fitting conforming to ANSI/ASME A112.19.8 must be installed.

	FLOW RATING							
		MAXI	MUM	MINIMUM				
PIPE		GPM	LPM	GPM	LPM			
1 <sup>1</sup> /2'	•	36	136	10	37			
2"		55	206	10	37			

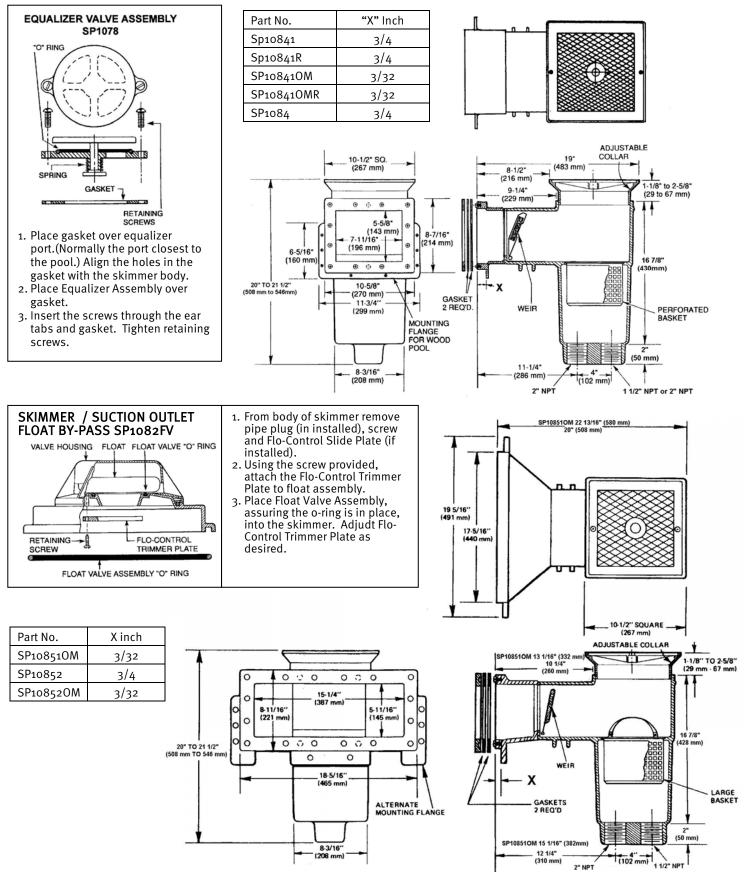






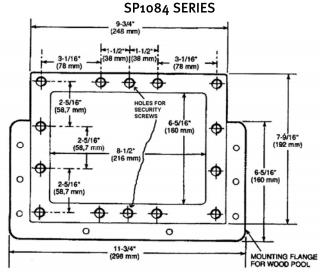
#### USE ONLY HAYWARD GENUINE REPLACEMENT PARTS





**USE ONLY HAYWARD GENUINE REPLACEMENT PARTS** 





CUT OUT PANEL : A-HEIGHT MAX 6 ¼" (150mm) Min 6" (152mm) B-WIDTH MAX 8 ¼" (210mm) MIN 8" (203mm) DRILL or PUNCH 14 HOLES ¼" DIAMETER AS SHOWN, TWELVE (12) FOR THRU HOLES , TWO (2) FOR SECURING SCREWS

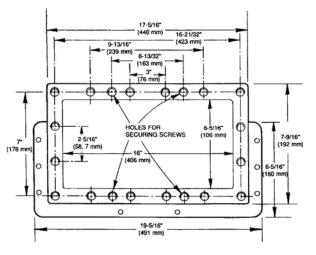
#### **INSTRUCTIONS FOR OTHER THAN WOOD PANEL**

- 1. Drill and cut wall panel section per above dimensions
- 2. Place gasket on skimmer face, making sure holes in gasket align with holes in skimmer face. (A very light application of silicon sealant will assist in holding gasket in place.)
- 3. Align skimmer face and gasket with drilled panel holes and fasten to wall panel at top center and bottom center (For SP1084 Series) with the pan head securing screws. Use appropriate holes and four screws for SP1085 Series.
- four screws for SP1085 Series.4. If vinyl liner pool, install liner before proceeding to step 5.
- 5. Align second gasket and face plate. Tightly fasten the skimmer face with the 1" long flat head screws. Sp1084 series (12) Sp1085 Series (16). If vinyl liner pool, pierce liner through face plate holes one at a time prior to inserting screws. Screws must go through Face Plate, Gasket, Liner, Wall Panel, Gasket, and into Skimmer Face.
- 6. If vinyl liner pool, cut out liner along inside edge of Face Plate.

#### **INSTRUCTIONS FOR WOOD PANEL WITH VINYL LINER**

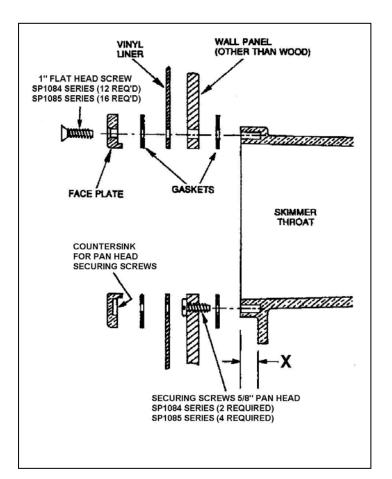
- 1. Cut out wall panel approximately 1/8" larger than *outside* dimensions of skimmer face (NOT Face Plate)
- Insert skimmer into panel cut out from rear. Butt the mounting flange against the rear of the panel. Use "U" shims, if necessary to make the face of the skimmer flush with the inside of the pool. Fasten the skimmer to the rear of the wood panel by securing with stainless or brass wood screws through the skimmer mounting flange.
- 3. Place gasket on skimmer face, make sure the holes in the gasket align with holes in skimmer face. (A very light application of silicon sealant will assist in holding gasket in place.)
- 4. Install vinyl liner.

#### SP1085 SERIES



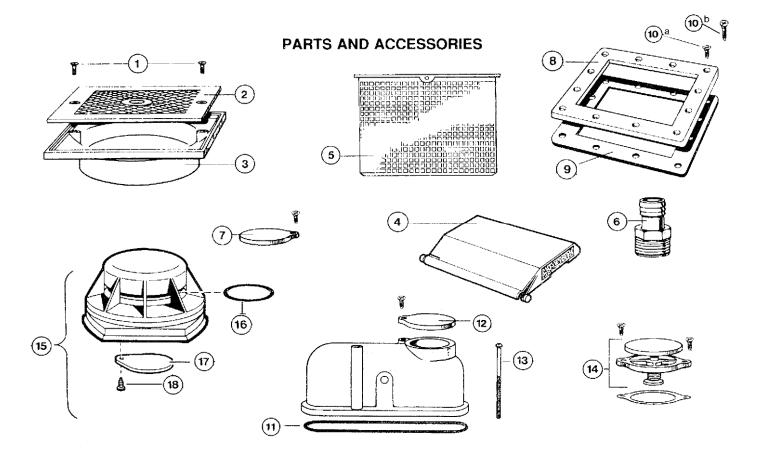
CUT OUT PANEL : A-HEIGHT MAX 6 ¼" (150mm) Min 6" (152mm) B-WIDTH MAX 15 13/16" (210mm) MIN 15 9/16"(203mm) DRILL or PUNCH 20 HOLES ¼" DIAMETER AS SHOWN, TWELVE (16) FOR THRU HOLES , TWO (4) FOR SECURING SCREWS

- 5. Align second gasket and face plate. Fasten tightly to skimmer face with 1" screws. Sp1084 series (12) Sp1085 Series (16). Pierce liner through face plate holes one at a time by inserting screws.
- 6. Cut out liner along inside edge of Face Plate.



#### USE ONLY HAYWARD GENUINE REPLACEMENT PARTS



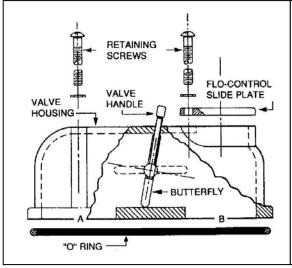


REF NO.	PART NUMBER	DESCRIPTION	NO. REQ'D		
1	SPX1082Z1	COVER RETAINING SCREW			
2	SPX1082E*	COVER - SQUARE			
2	WGX1082E	COVER – SQUARE FOR COMMERCIAL APPLICATIONS			
2	SPX1084R	COVER - ROUND			
3	SPX1082F	ADJUSTING COLLAR - SQUARE			
4	SPX1082K*	WEIR ASSEMBLY	1		
5	SPX1082CA	BASKET	1		
6	SPX1082Z3	VACUUM ADAPTER			
7	SPX1082H1	FLO-CONTROL SLIDE PLATE			
8	SPX1048L*	FACE PLATE (SP1084)	1		
8a	SPX1085B*	FACE PLATE (SP1085) WIDE TRACK	1		
9	SPX1084B	GASKET (SP1084)	2		
9	SPX1085D	GASKET (SP1085) WIDE TRACK	2		
10	SPX1084Z4	SCREW SET CONTAINING 12 SHORT FLAT HEAD SCREWS AND 2 PAN HEAD SCREWS	1		
10	SPX1084Z4AM	SCREW SET CONTAINING 12 LONG FLAT HEAD SCREWS AND 2 PAN HEAD SCREWS	1		
10	SPX1085Z1	SCREW SET CONTAINING 16 SHORT FLAT HEAD SCREWS AND 2 PAN HEAD SCREWS FOR WIDE TRACK	1		
10	SPX1085Z1AM	SCREW SET CONTAINING 16 LONG FLAT HEAD SCREWS AND 4 PAN HEAD SCREWS FOR WIDE TRACK	1		

#### \* Add GR, DGR, or BLK suffix for Gray, Dark Gray or Black

11	SPX1082Z5B	O-RING	1
12	SPX1082H1A	FLO-CONTROL SLIDE PLATE	1
13	SPX1082Z6	RETAINING SCREW	2
14	SP1078	EQUALIZER VALVE ASSEMBLY	1
15	SP1082FV	FLOAT VALVE ASSEMBLY	1
16	SPX1070Z2	FLOAT VALVE O-RING	1
17	SPX1070FA	FLO-CONTROL PLATE	1
18	SPX1070Z6	RETAINING SCREW	1
19	SP1082GV	SKIMMER VALVE ASSEMBLY	
20	SP1106	ASSEMBLY SKIM-VAC PLATE W/ GASKET (NOT PICTURED)	
21	SP1107	SKIM-VAC PLATE (NOT PICTURED)	

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#### INSTALLATION INSTRUCTIONS VALVE ASSEMBLY, SKIMMER SUCTION OUTLET SP1082GV

- 1. From the bottom of the strainer body, remove the pipe plug and original slide plate (If Installed).
- Insert O-ring in SP1082GV Valve housing. Place assembly on the bottom of the skimmer. Port "A" (The one without the hole in the top) goes over the Suction Outlet (Main Drain) port. Port "B" over the PUMP PORT (Normally the rear connection.)
- 3. Insert front Retaining Screw, through washer and valve body, screw lightly into skimmer body.
- 4. Insert rear Retaining screw through washer SP1082H Flo-Control Slide Plate and valve body. Screw down firmly into skimmer body.
- 5. Tighten the front retaining screw.

#### PRODUCT REGISTRATION

(Retain For Your Records)

DATE OF INSTALLATION

▲ Retain this Warranty Certificate (upper portion) in a safe and convenient location for your records.

DETACH HERE: Fill out bottom portion completely and mail within 10 days of purchase/installation or register online.

### AUTOMATIC SURFACE SKIMMER

Warranty Card Registration

Register online at www.haywardnet.com

Please Print Clearly:			Years Pool has been in	service
First Name	Last Name		< 1 year 1-3 4	-5 6-10 11-15 >15
Street Address			Purchased from	
City	State	Zip		Pool Service Internet/Catalog
Phone Number	Purchase	Date		
E-Mail Address			City	State Zip
			Phone	
Model Number			Type of Pool:	
Pool Capacity	(U.S. Gallons)		U Other	
□Please include me on all e-mail c <u>Mail to:</u> Hayward Pool Prod <u>Attn:</u> Warranty Dept			New Installation	C Replacement
Or REGISTER YOUR WARRAN	TY ON-LINE AT <u>WWW.HAY</u>	WARDNET.COM	Installation for:	ve Ground 🗌 Spa



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## HAYWARD

In-Ground Skimmers

Hayward in-ground pool skimmers are the preferred choice of professional pool builders. Engineered for residential applications, these large capacity skimmers are manufactured to Hayward's rigorous quality standards. Their durable, unibody construction is molded of rugged ABS, and they've been designed without submerged joints. Hayward skimmers come with multiple plumbing connections for easier installations.

All Hayward skimmers are non-corrosive, non-conductive and virtually indestructible, no matter what Mother Nature dishes out.

All vinyl/fiberglass pool skimmers are packaged with face plate, gaskets and screws.



### SP 1080 Auto-Skim<sup>™</sup> Series

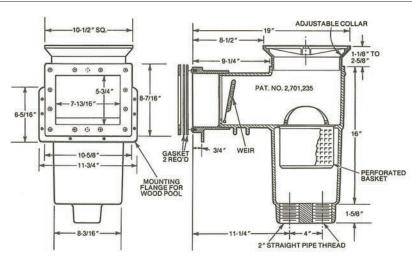
Auto-Skim features include an automatic by-pass for low water conditions, adjustable cover collar, snap-in weir that adjusts automatically to water level fluctuations up to 4 ½", a rigid, 163 cubic inch basket, integral Flo-Control slide plate and a choice of threads for piping versatility. The SP1084 line — engineered for in-ground vinyl/fiberglass applications — offers an 8 ½" throat, a weather-beating ABS face rim for longevity, and 9 ½ " diameter round cover (10841R). They are also available with Float Valve and Equalizer Kit to meet specific NSF commercial requirements.

Model Number	Pipe Size	Cover Style	Throat Length	Ctn. Qty.	Ctn. Weight	Product Descriptions
SP10841*	1 ½" FIP	Square	8 1⁄2"	1	13 lbs.	
SP10841R*	2" FIP	Round	8 1⁄2"	1	13 lbs.	
SP10841OM**	1 ½" FIP	Square	8 1⁄2"	1	13 lbs.	ABS body, adjustable cover collar, tamper-proof cover, basket, weir, Flo-Control slide plate, ABS face rim (white),
SP108410MR**	1 1⁄2" FIP	Round	8 1⁄2"	1	13 lbs.	gaskets, and screws.
SP1084**	2" FIP	Square	8 1⁄2"	1	13 lbs.	
SP1084R**	2" FIP	Round	8 1⁄2"	1	13 lbs.	

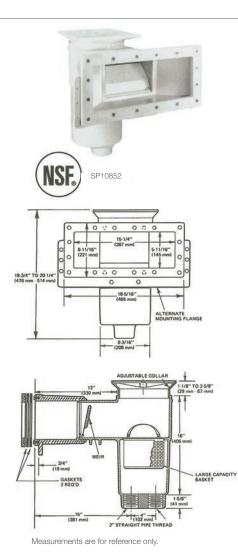
\*Skimmer includes standard and extra long 1 1/4" screws.

\*\*Available in Dark Gray – add suffix DGR for Dark Gray.

"R" designation indicates round collar and cover assembly OM designation indicates thru-wall, outside mount for metal wall installations.



Measurements are for reference only.



SP 1080 Auto-Skim<sup>™</sup> Wide Track Series

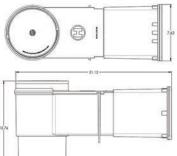
Manufactured to Hayward's uncompromising standards, these tough, large capacity skimmers install easily and perform flawlessly in your in-ground vinyl and fiberglass jobs. Molded of  $\frac{3}{16}$ " ABS, they're unaffected by even the most extreme variations in climate. The Wide Track Series includes a broad, 15 ½" skimmer face opening that efficiently swallows debris, a square cover, and a choice of throat lengths from 9 ¼" to 12 ¼". Auto-Skim Wide Track Series Skimmers are available with Float Valve and Equalizer Kit to meet specific NSF commercial requirements.

Pipe Size	Cover Style			Ctn. Weight	Product Descriptions
1 ½" FIP	Square	12 ¼"	1	17 lbs.	ABS Body, adjustable cover collar, tamper-proof cover, basket, weir, Flo-Control plate. 12 ¼" long throat and 15 ½" wide skimmer opening. Face rim, gaskets and screws.
1 ½" FIP	Square	9 1⁄4"	1	16 lbs.	Same as SP10851, but with 9 ¼" (235mm) long throat and mounting flange for up to 1" thick walls.
1 ½" FIP	Square	9 1⁄4"	1	16 lbs.	Same as SP10852, but packaged complete with SP1082FV Float Valve and SP1087 Equalizer Valve (NSF Listed)
	Size 1 ½" FIP 1 ½" FIP	Size Style   1 ½" FIP Square   1 ½" FIP Square	SizeStyleLength1 ½" FIPSquare12 ¼"1 ½" FIPSquare9 ¼"1 ½" FIPSquare9 ¼"	Size     Style     Length     Qty.       1 ½" FIP     Square     12 ¼"     1       1 ½" FIP     Square     9 ¼"     1       1 ½" FIP     Square     9 ¼"     1	Size     Style     Length     Qty.     Weight       1 ½" FIP     Square     12 ¼"     1     17 lbs.       1 ½" FIP     Square     9 ¼"     1     16 lbs.

\*Available in Dark Gray - add suffix DGR for Dark Gray.

OM designation indicates thru-wall, outside mount for metal wall installations.





### SP 1097 Auto-Skim<sup>™</sup> PT & Economy Series

Model	Pipe	Cover	Throat	Ctn.	Ctn.	Product Descriptions
Number	Size	Style	Length	Qty.	Weight	
SP1097	1 ½" FIP	Round	12 ½"	1	9 lbs.	ABS Body, adjustable cover collar, cover, basket, weir, 12 ½" throat. Face rim (white), gaskets and screws.

Measurements are for reference only.

To find out more information about In-ground Vinyl Skimmers or other Hayward products, go to hayward.com or call 1-888-HAYWARD.



### POOLBOND BY PERMIN

THE 2008 NATIONAL ELECTRICAL CODE (NEC) REQUIRES THAT AN INTENTIONAL ELECTRICAL BOND BE MADE TO THE POOL WATER. THIS REQUIREMENT IS SPELLED OUT IN SECTION 680.26(C) OF THE NEC. THIS REQUIREMENT COVERS BOTH INGROUND AND ABOVE GROUND POOLS, SPAS AND FOUNTAINS.

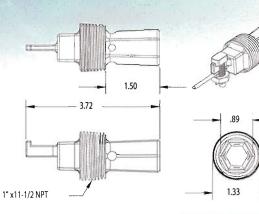
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- 10.5 SQUARE INCHES OF SURFACE AREA CONTACTS THE POOL WATER
- SPLIT BOLT LUG PROVIDES EASY & RELIABLE CONNECTION TO BONDING WIRE

## POOLBOND PB-2008



ACTUAL SIZE



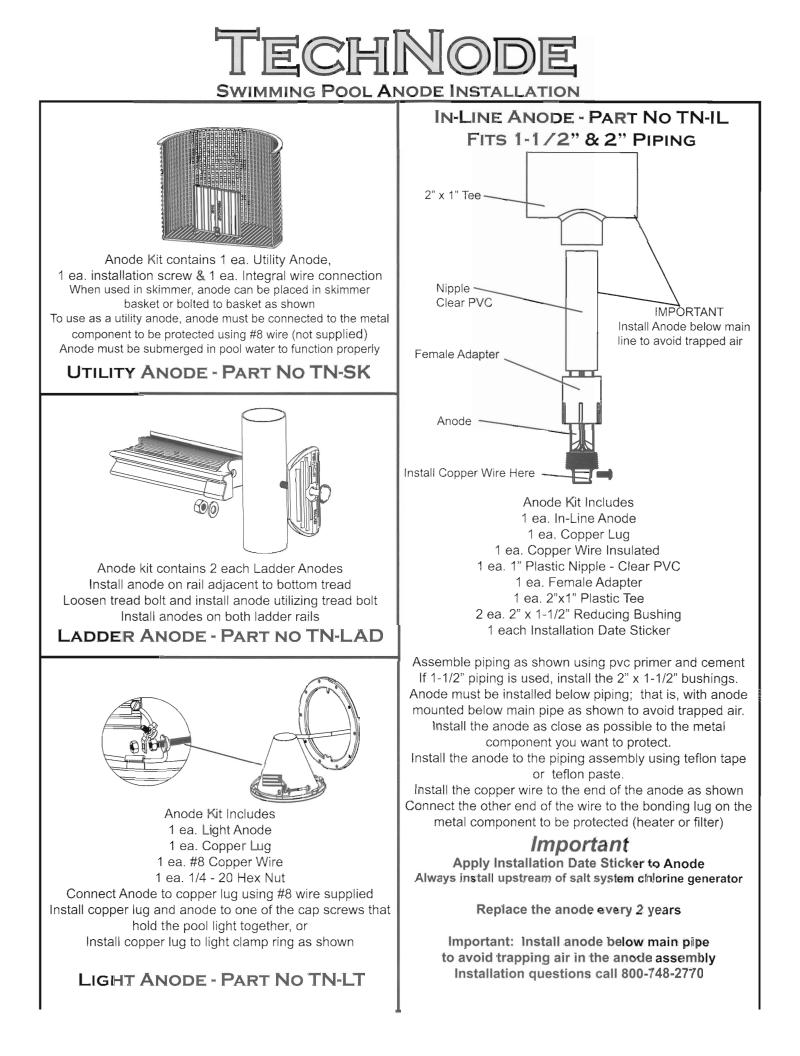
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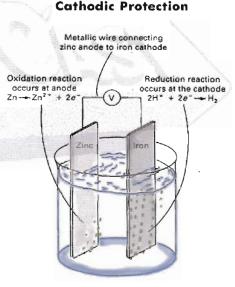
## SALT SYSTEM CORROSION

**Salt System Swimming Pools:** Sanitation of swimming pools using chlorine generators has become the method of choice for the pool professional. The addition of salt to the pool water creates a more corrosive environment for metals in the pool. A number of variables affect the actual corrosion of metals in pools. PH, water temperature, total alkalinity, chlorine levels, salt concentration levels and improper metal bonding can all contribute to corrosion of metals in the swimming pool. It is essential to maintain proper water balance with respect to PH, chlorine, and total alkalinity. Proper monitoring of salt concentration levels is critical in controlling metal corrosion. Salt levels should never exceed the maximum concentrations recommended by the Salt System Manufacturer. In addition, all metal components must be bonded according to accepted construction practices. Even with all these variables under control, metal corrosion in the salt pool is very likely. Additional methods of corrosion protection should be used to avoid problems.

What is a Sacrificial Anode? A sacrificial metal anode is used to protect critical metal components in a salt system swimming pool. The sacrificial anode is connected electrically (either through direct contact or by use of a wire) to the metal to be protected. In a salt system pool, for example, a pool heater core will normally tend to corrode as a result of being in contact with the pool water. If this heater core is connected

to a properly designed sacrificial anode, the anode will tend to corrode and transfer electrons to the heater core. At the interface between the pool water and heater core these electrons will create a chemical reaction that protects the heater core. The heater core (cathode) attracts electrons produced by the corroding sacrificial anode. The electrons react at the surface of the heater core with elements in the water. This reaction protects the heater core at the expense of the sacrificial anode. This transfer of electrons from the sacrificial anode to the metal to be protected is referred to as Cathodic protection. Cathodic Protection is illustrated to the right.

**Examples of Sacrificial Anodes:** All water heaters utilize sacrificial anodes to protect their steel tanks from corroding. The single most important factor in whether a water heater lives or dies is the condition of its sacrificial anode. Ships have anodes installed on their hulls to protect the steel hull from corroding in sea water. Lobster traps utilize sacrificial anodes to prevent corrosion on the ocean floor. Off shore oil rigs, buried pipelines, storage tanks, steel piers, and oil wells all utilize sacrificial anodes to prevent corrosion and premature failure of their critical components.



Cathodic protection of iron by zinc

Why use TechNodes: TechNodes are the result of research done by Scientists at the Georgia Institute of Technology. TechNodes are sacrificial anodes designed specifically to protect critical metal components in Salt System Swimming Pools. TechNode In-line is designed to protect any metal components in the pools plumbing, including pool heaters and heat exchangers. TechNode Ladder will protect pool ladders that are submerged in the swimming pool. TechNode Light will prevent corrosion of metal components on underwater lights. TechNode Utility is designed to protect any other metal components in the swimming pool. TechNodes are cast from Mil Spec Zinc, have high surface area to volume characteristics resulting in the most efficient Pool Anodes on the market.



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